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Attorney Docket Number

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Cit Initials* No								
M	1	PANYUTIN and HSIEH, "Formation of a Single Base Mismatch Impedes Spontaneous DNA Branch Migration," J. Mol. Biol., 230:413-424 (1993).						
D	2	REDDY et al., "Human Rad52 protein promotes single-strand DNA annealing followed by branch migration," Database Medline-NLM, Mutation Research 377(1):53-59 (Abstract), Netherlands, AN 97363253 (Jun. 1997).						
17	3	NEW et al., "Rad52 protein stimulates DNA strand exchange by Rad51 and replication protein A, " Nature (London), 391:401-410 (Jan. 1998).						
lp	4	OGAWA, T., et al., "A Species-Specific Interaction of Rad51 and Rad52 Proteins in Eukaryotes", Adv. Biophys. vol. 31:93-100 (1995).						
M	5	PARK, M.S., et al., "Physical Interaction Between Human RAD52 and RPA is Required for Homologous Recombination in Mammalian Cells", The Journal of Biol. Chem. vol. 271(31):18996-19000 (1996).						
47	6	SHEN, Z., et al., "The Human and Mouse Homologs of the Yeast RAD52 Gene: cDNA Cloning, Sequence Analysis, Assignment to Human Chromosome 12p 12.2-p13, and mRNA Expression in Mouse Tissues", Genomics 25:199-206 (1995).						
lej	7	BENDIXEN, C., et al., "Identification of a Mouse Homologue of the Saccharomyces cerevisiae Recombination and Repair Gene, RAD52", Genomics 23:300-303 (1994).						
ħ	8	OGAWA, T., et al., "RecA-like Recombination Proteins in Eukaryotes:Functions and Structures of RAD51 Genes", Cold Spring Harbor Symposia on Quantitative Biology, vol. LVIIL:567-576 (1993).						
d)	9	PARK, M.S., "Expression of Human RAD52 Confers Resistance to Ionizing Radiation in Mammalian Cells", The Journal of Biological Chemistry, vol. 270(26):15467-15470 (1995).						
W)	10	BEZZUBOVA, O.Y., et al., "Identification of a Chicken RAD52 Homologue Suggests Conservation of the RAD52 Recombination Pathway Throughout the Evolution of Higher Eukaryotes", Nucleic Acids Research 21(25:5945-5949 (1993).						
65	11	SMITH, J., et al., "A Mutation in the Gene Encoding the Saccharomyces cerevisiae Single-Stranded DNA-Binding Protein Rfal Stimulates a RAD52-Independent Pathway for Direct-Repeat Recombination", Molecular and Cellular Biology, vol. 15(3):1632-1641 (1995).						
M	12	SUGAWARA, N., et al., "DNA Structure-DependentRequirements for Yeast RAD Genes in Gene Conversion", Nature, vol. 373:84-86 (1995).						
U	13	RATTRAY, A.J. et al., "Use of a chromosomal Inverted Repeat to Demonstrate that the RAD51 and RAD52 Genes of Saccharomyces cerevisiae Have Different Roles in Mitotic Recombination", Genetics 138:587-595 (1994).						

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as	14	HAYS, S.L., et al., "Complex Formation in Yeast Double-Strand Break Repair: Participation on Rad51, Rad52, Rad55, and Rad57 Proteins", Proc. Natl. Acad. Sci, USA, Genetics vol. 92:6925-6929 (1995).	
6	15	SHINOHARA, A., et al., "Homologous Recombination and the Roles of Double-Strand Breaks", TIBS 20:387-391 (1995).	
15	16	JOHNSON, R.D., et al., "Functional Differences and Interactions Among the Putative RecA Homologs Rad51, Rad52, and Rad57", Molecular and Cellular Biology 4843-4850 (1995).	
M	17	MILNE, G.T., et al., "Dominant Negative Alleles of RAD52 Reveal a DNA Repair/Recombination Complex Including Rad51 and Rad52", Genes & Development 1755-1765 (1993).	
ħ	18	ADZUMA, K. et al., "Primary Structure of the RAD52 Gene in Saccharomyces cerevisiae", Molecular and Cellular Biology vol. 4(12):2735-2744 (1984).	
n	19	DONOVAN, J.W., et al., "Homotypic and Heterotypic Protein Associations Control Rad51 Function in Double-Strand Break Repair", Genes & Development 2552-2562 (1994).	
B	20	SHEN, Z., et al., "Specific Interactions Between the Human RAD51 and RAD52 Proteins", The Journal of Biological Chemistry vol. 271(1):148-152 (1996).	
£7	21	KLEIN, H.L., "Genetic Control of Intrachromosomal Recombination", BioEssays vol. 17(2):147-159 (1995).	
4	22	HABER, J.E., "In vivo biochemistry: Physical monitoring of recombination induced by site-specific endonucleases", BioEssays vol. 17(7):609-620 (1995).	
Ä	23	MORTENSEN et al. DNA strand annealing is promoted by the yeast Rad52 protein. PNAS (USA) vol. 93:10729-10734, Oct. 1, 1996.	
47	24	SUGAWARA et al. Characterization of double-strand break-induced recombination: Homology requirements and single-stranded DNA formation. Mol. Cell. Biol. vol. 12(2):563-575, Feb. 1992.	
. Ny	25	MURIS et al. Cloning of human and mouse genes homologous to Rad52, ayeast gene involved in DNA repair and recombination. Mut. Res., DNA Repair. vol. 3315:295-305, Dec. 1994.	

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